



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Ihab H. Elzind

Confirmation No.: 8080

Application No.

09/988,116

Filed:

November 16, 2001

Group Art Unit:

2661

Examiner:

Title:

SMART ANTENNA'S FOR CELLULAR MODEM NETWORKS

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### RESPONSE TO NOTICE TO FILE CORRECTED APPLICATION PAPERS

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

### Sir/Madam:

By

In response to the Notice to File Corrected Application Papers mailed November 16, 2001, the applicant hereby resubmits the Claims and the Abstract each on a separate substitute sheet. No new matter has been introduced, as the resubmitted Abstract and Claims are identical to the original Abstract and Claims.

The applicant requests further examination and reconsideration in view of the included substitute sheets. The applicant respectfully submits that the application now complies with the regulations cited by the United States Patent & Trademark Office in its Notice to File Corrected Application Papers. If there are any questions regarding this correspondence, please contact the undersigned at (408) 293-9090.

Respectfully submitted, Law Offices of Derek J. Westberg

Derek J. Westberg

Reg. No. 40,872

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#### Claims

To further define the use of multiple antennas or a multibeam antenna in a modem, Base station network we claim:

- 1. A packet protocol based wireless network where there is modems and a base station Exchanging packets in a known packet format where there is a field that identifies:
  - a. An antenna number where the packet is received on and an antenna number Where the packet is retransmitted on at the receiveing modem.
  - b. In a multibeam antenna a configuration field shall describe the beam number Where the packet is received on and abeam number where the packet is transmitted on.

The beam numbers or the antenna numbers are not necessarley the same, and They can be same if needed.

2. In a configuration where a modem has a multibeam antenna or multiple
Antennas, the modem will search for a base station reception by scanning
Through the multibeams or the different antennas connect to it until it
Finds a base station further eliminating human intervention to adjust the
Direction of antennas.

# Abstract

The paper describes the use of smart multibeam antenna or multiple antennas with a smart modem that uses A packet based protocol. Smart antennas are multi narrow beam antennas in one antenna housing as shown in Fig. AM.1 and Fig. AM.2.